9/Response w/sub spec & drawing
Gp 3626
9/24/03
Lawan

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09, 583, 336

Commissioner of Patents & Trademarks
Technology Center
Art Unit 3626
Washington, DC. 20231

Attention: Examiner Alexander Kalinowski

RE: First Office Action Response- Application 09/583,336

Inventor: William Reeves

Filing Date: 5/31/2000

Dear Mr. Kalinowski, Reply Date: 11/20/02

Thank you for the advice you have given me by telephone over the last few months in regards to this patent application and office action. I have carefully reviewed your office action comments and will respond point by point to each objection you raise. As an inventor with 12 US patent and 5 foreign patents I have been through this process before and I am confident that we can work together to resolve these issues and move my patent forward with its claims. As a small entity and business owner I would appreciate any help and advise you could give me during this process, I certainly do not claim to know everything about prosecuting patents in a pro se manner

I will address each of your objections using the numbering you have used in your office action and in numerical order so that you may follow along easily.

General Comments about this patent application:

I would like to point out to you that our small business has actually developed and is using a computer system (invention) as described within this patent application along with the bodily worn devices and storage card . We have also successfully marketed our products to hospitals, physicians, And consumers so our invention is not an abstract idea but has real practical and useful applications.

I would also like to point out that this invention is related to 3 other patent applications (by me) which are in the process of issuing or being close to issuing with all claims intact: 6,467,690 (issued) 09/578,664 and 09/597,107. The four patents, when combined, describe pieces of an overall invention system for the storage, carrying and wearing, and retrieval of personal emergency medical data and records.

I would also point out to the examiner that before I wrote this (an all my patents) application I did an exhaustive patent search of prior art using many key words and phrases and have listed the prior art in my application which I felt most closely related to my application at the time is was written (but not necessarily conceived- I have a lab notebook in which I outlines these inventions in 1993 and 1994).

The intent of this invention, which is consistent with its present use in practical medical applications, is to describe a novel system for organizing digital medical records, which could be stored and carried in bodily worn devices (or storage cards) and retrieved rapidly in a medical emergency by either handheld computer devices or more permanent computer devices. It is important to note that the quality, quantity and clinical significance of the medical records is important in properly treating user/patients in a medical emergency. Of particular importance is the memory capacity of the bodily worn device which must be capable of carrying EKG's, x-rays, blood and urine analysis, as well as other memory intensive tests and documents. A color photo ID is also stored within the bodily worn device which is also a large digital file.

In light of the memory intensive nature of medical records the prior art invention of Yeager PCT 97/22297 is woefully inadequate to provide for a device which is capable of storing and carrying a clinically significant and meaningful amount of medical records for properly treating patient/user in a medical emergency. In Yeager page 7 lines 1-8 it clear that Yeager is limiting his data cell memory technology to either non-volatile SRAM or EPROM memory. This memory technology has severe limitations in capacity which would simply make Yeager's statements of "portable storage of all a person's medical records unrealistic and unattainable with his art. Yeager further limits his art by specifically citing the Dallas Semiconductor 1996 family of devices which, as of this date, do not hold more than 8,000 bits of digital data. To put it quite bluntly it appears the entire Yeager art of the data cell is clearly describing the technology incorporated by Dallas Semiconductor which was published and available to the public long before the 12/20/95 priority date or the 12/16/96 international filing date. The Yeager art and other prior art which is cited by the examiner contains other significant disadvantages including the fact that my bodily worn device and storage card art does not require any on board electrical battery for power source and I describe novel new ways to transmit both power and data to the bodily worn device in non-contact means. Yeager also has numerous other significant deficiencies to his art in relation to mine, including failing to teach how to provide for wireless transmission of data to and from his "data cell." Yeager mentions wireless transmission of data to and from his data cell but he fails to teach in any way how to accomplish this, making the claim hollow and meaningless. I will elaborate on this issue further and specifically point out how I teach wireless transmission of data to my bodily worn device as I specifically address each of the examiners citations.

There is a wealth of medical data and studies that show that when a person arrives in an Emergency Room in trauma they rarely (less than 7% of the time) have any medical records or medical history with them and the ER has no means of gaining access to such medical data in a medical emergency. The result is that 93% of the people treated in US emergency rooms are treated with no benefit of medical history, current prescriptions, prior medical tests and knowledge of the patient. This results in many serious medical errors in the form of severe drug interactions, misdiagnosis, and mistreatment of patients which result in serious long term illness, lengthy hospital stays and in some cases death. Considering the fact that there were 110 million visits in the ER in 2001 this is a serious problem in the health care system.

I would also like to point out to the examiner that after re-reading my patent application text I concluded that I significantly short changed myself when I originally wrote my claims and missed numerous detailed claims which are all included in the original scope and body of my text (no new subject matter has been added) Therefore, I have added new claims to account for these oversights and well as modified some claims to clarify and strengthen the meaning and intent of the claims (the examiner specifically requests this in his note 4 and 5- see below).

Specification Objections:

2. The abstract is not on a separate sheet of paper. I have separated the abstract as required and modified it slightly to more clearly define the intent and practical use of the invention as described above.

Claim Objections

3. I have made the corrections to the typos which the examiner noted and rearranged the text of the patent to conform to the suggested standard format for patent applications.

4& 5. The examiner has noted that my claims, and particularly claim 1, fail to distinctly point out the subject matter which is the invention. Accordingly, I have modified claim 1 and claims 2-15 to more distinctly point out the art of my invention. I have also added figures 7, 8 and 9 to more clearly and distinctly describe and point out the software art which is part of my invention. The examiner requested that I more specifically detail and describe the software of my art and specifically point out which sections of the hardware the software is acting upon and controlling.

In addition, after carefully reviewing the text of my patent, without adding any new material or art to the scope and subject matters, I have concluded that I missed some important claims that I should have included in my original filing. According to the USPO rules I have added these new claims to the modified claims included within this package, and said claims are within the original subject matter of my application.

I would also point out that I have included detailed descriptions of figures 7, 8 and 9 within the text of the body of the application which should further clarify the function of the software in my art. Again, these additions do not change or add to the original scope of the subject matter of my application.

6. The examiner has made a general reference to USC 103(a) in regards to art being obvious in relation to other prior art. I would respectfully point out to the examiner that the term "obvious" is a very subjective term as is certainly subject to the interpretation of the examiner and his knowledge of the specific art involved and its practical applications in industry.

In general you are using the argument that my invention and claims were "obvious at the time... to a person skilled in the art to which said subject matter pertains." I would respectfully submit that the term "obvious" is a subjective yardstick that is subject to the interpretation of the respective examiner, and their knowledge of the technology field and its practical industry applications. From my experience many novel ideas appear to be obvious with the benefit of hindsight and not having a complete understanding of the intent of the inventor which conceived the invention.
With this understanding I will further describe the intent of my invention as it relates to the application and will address point by point and in a factual manner your detailed objections to my claims.

I would also point out to the examiner that before I wrote this (an all my patents) application I did an exhaustive patent search of prior art using many key words and phrases and have listed the prior art in my application which I felt most closely related to my application at the time is was written (but not necessarily conceived- I have a lab notebook in which I outlines these inventions in 1993 and 1994).

7.The examiner uses the "obvious" criterion and cites Yeager 97/22297 and Sellers 5,678,562. The examiner specifically cites the Yeager abstract and fig 1 as "discloses an apparatus for storing and/or retrieving and/or organizing medical records and other vital personal information from bodily worn storage devices." After careful review of the Yeager abstract I would respectfully disagree with some of the examiners observations. Specifically, the Yeager abstract makes no mention at all, from either a conceptual or literal perspective, of "retrieving" or "organizing" or "other vital personal information." I simply do not see how the examiner can infer such items from the Yeager abstract and it is my respectful opinion that the examiner is reading more into the Yeager abstract than really exists. The terms "organizing" and "vital personal information" are key points which are specific aspects of my art which are simply not part of the Yeager art. Specifically, I describe in detail how the condensed medical records of my art are organized in a priority fashion based on the severity of the pre-existing medical condition of the user and ranked by weighted average based on their clinical utility in treating a user in a medical situation. In addition, Yeager makes no reference to "other vital personal information" other than medical records. My art specifically includes a color photo ID of a user, living will instructions, organ donor instructions, and other personal non-medical information which could include banking information, credit card information and other personal and family related information which may aid in a medical or other type of emergency. Yeager does us the word "worn" in his abstract and specifically limits his art to such worn devices. My art is not specifically limited to worn devices and I specifically describe high capacity storage cards and data storage disks (my figure 6) which can be either carried in the pocket or wallet and are not specifically worn. Based the scope of this subject matter in my art I have modified both the title of my invention and abstract to reflect the broader scope of my art in terms of "personal data storage devices" and specifically "worn" devices.

From a practical point of view Yeager's abstract, and the body of his invention, describe storing a person's "medical records." Yeager describes storing the complete medical records and archives of a person on this data cell device. This is simply an impractical concept, particularly in the context of a medical emergency as described by Yeager. Emergency medicine is a highly specialized form of medicine and presenting the complete archives of a person's medical history would have little or no practical medical value. Emergency medicine, and its utilization of prior medical data of a patient, specifically relies on a focused organization of medical data based on a ranking (priority) of the severity of a pre-existing condition and the clinical utility of the medical data in treating the pre-existing medical condition during said emergency. No invention or prior art, including Yeager or Sellers or other, describes the art in my application for prioritizing and ranking said medical data by weighted average in order of severity of pre-existing condition. This "organization" as described by my art is a superior art and technology which would not have been obvious to one skilled in the art and specifically has not been taught by any of the prior art or the examiner.

In addition, it would not have been obvious to a person skilled in the art to have include a high capacity data storage card or a data disk as described in my 6, 467,690 patent which issued on 10/22/02. I also have art which is related to this application which is further described in 09/578,664 and 09/597,107 which have been previously noted and referenced in the reorganized body of my application (enclosed).

The examiner cites Yeager page 5 lines 5-15, line 28 and page 6 line 2 and table 1 as Yeager teaching a" bodily worn storage device capable of storing digitized (digital) personal medical records and other vital information." After careful review of these citations I can find no reference to key concepts such as "digital or digitize" and "other vital information. In a very broad sense the scope of the Yeager art is "similar" to my art but my art is far superior and an improvement over the Yeager art by virtue of my teaching a data storage device which does not require a battery or on board power cell, teaching how to simultaneously transmit data signals and electrical power to my storage device in a non-contact wireless manner, high capacity personal data storage devices capable of storing over 200 megs of practical clinical medical information, and a means of organizing the medical records in a unique priority system based on a weighted average of risk indicators and clinical severity or pre-existing medical conditions and their treatment in a medical emergency.

The examiner cites Yeager page 5 lines 18-23 as citing "a portable field unit.... transmitting said digital information by wireless means." I assume the examiner is referring to Yeager's claim 9 and the unique wand being able to send data to and from the data cell via wireless means(?) After a careful review of the entire Yeager patent I find no reference to any art at all which teaches how this "wireless data transfer from the wand to the data cell is to take place. Yeager specifically cites on page 7 the data cell comprising either SRAM, EPROM, non volatile memory, along with specifically citing the Dallas Semiconductor 19XX family of touch memory devices. It is well known within the electronics industry, and to those skilled in the art, that none of the devices references by Yeager are capable of such wireless data transmission. Yeager makes no attempt to teach how such semi conductor storage devices could send and receive data in a wireless manner. Therefore, one must conclude that the Yeager patent is deficient and one must question how the international examiner allowed Yeager's claims to be allowed on this wireless issue. My application is very specific in its art in this regard and I teach in detail how data is transmitted as well as received to and from the data storage devices described herein, in a wireless manner (including Radio Frequency means and inductance means). I also teach in a specific and detailed manner how electrical power is transmitted to the storage devices via non contact wireless means (inductance and other means).

The examiner cites Yeager page 13, lines 5-14 and 17-30 as "a base unit capable of receiving said digital medical records and organizing them into readable and medically significant information for emergency treatment options." After examining these citations I see no specific reference at all to Yeager using the term "medically significant" or "significant." In general terms Yeager describes storing general medical information which "may be useful in an emergency." The Yeager approach is to basically "shotgun" it and present a physician with a listing medical information and it is up the physician to sort through the information and determine what is appropriate to use in an emergency where time and accuracy and critical to patient survival. There is nothing unique or novel about Yeager's approach in organizing these records. This is a woefully inadequate means of providing for medical information in an emergency. As previously described emergency medicine is a very specialized and niche discipline of medicine which requires very specific clinical information, medical tests, prior medical records and other patient information in order to accurately and efficiently diagnose and treat people in a medical emergency. My art is far superior and unique to the Yeager art because I specifically teach a novel mathematical method for combining clinical risk factors, statistical probability factors for proper medical treatment and outcome which provide an accurate and scientific means of organizing medical records in a priority manner for the optimal treatment of patients in medical emergencies. My art has been devised with the advise of some of the leading Director of Emergency Medicine in the US including Dr. Michael Carius, President of the American College of Emergency Physicians. My art methodizes the complex cognitive approach which emergency physicians must take each time they encounter a medical emergency with perhaps some prior medical records present. A physician must cognitively and somewhat subjectively weight the risk

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factors of pre-existing conditions, along with the prior medical records which may be present, and weight these factors against the time constraints of performing additional tests in the ER verses rapid treatment bases on the statistical probability of a positive patient outcome. My art unique in this regard and no one (Yeager of other citations included) has ever combined these risk factors and medical records into a means of organizing and prioritizing medical data for emergency medical treatment. Please reference figure 8 of my application in regard to the organization of the records and its description in the text.
I would also point out to the examiner that I have modified the software sub-claim of claim 1 to further clarify the organization of the medical data as part of my art.

The examiner cites Yeager figures 7A and 7B page 7 lines 20 and page 8 line 10 as "software for digitizing, organizing and displaying critical patient information in page format....." Again, based on the arguments presented above, my approach to organizing medical records based on establishing a priority by novel risk weighing factor of pre-existing conditions, time lapse to treatment, clinical risk factors and other factors, is much more effective and objective as a means of providing ER physicians and other treating medical personnel with an objective and rapid means of making complex treatment decisions (minutes and seconds count in ER treatment and could be the difference between life and death). Again, if the examiner references my figures 4, 7 and 8 and their detailed descriptions I am confident that he will conclude that my approach is novel and superior to the Yeager approach, as well as the other examiner citations. I would also point out to the examiner that I have modified the software sub-claim of claim 1 to further clarify the organization of the medical data as part of my art.

Again, in terms of software and medical data organization, if one looks at Yeager Table 1 this is an overly simplistic and medically inferior means of organizing patient information for a medical emergency. As one can see, as previously cited by me, the Yeager memory storage approach with the data cell he describes, along with this data organization approach in Table 1 is woefully inadequate for storing any critical baseline clinical tests such as EKG, blood analysis, urine analysis, x-ray, echocardiogram and other tests which require significant memory capacity and could easily save a patient's life in an emergency. The data cell which Yeager describes can only hold about 4000 bits of digital information (including the Dallas 19xx EPROMS and other devices as of this date). The typical digital EKG file takes up a minimum of about 20 kilobytes of data and ER physicians have stated that having a baseline EKG, particularly in the treatment of any person with a pre-existing cardiac condition is THE MOST important piece of medical information for establishing a risk baseline of the patient for treatment options. As one can see from Yeager's Table 1 he makes no attempt to organize the medical data in any specific priority based on risk factors and pre-existing condition which is described in detail in my art, and is far superior to Yeager's approach. In terms of proper memory capacity for a data storage device for this application I would point to my patent 6, 467, 690 and figure 6 of this application which clearly describes a digital storage card capable of holding a minimum of 2000-300 megabytes of digital medical records. This card is capable of storing x-rays, CAT scans and other critical medical tests which could be life saving in an emergency. This art is far superior to Yeager's art. I would also point out to the examiner that I have modified the software sub-claim of claim 1 to further clarify the organization of the medical data as part of my art.

The examiner acknowledges that Yeager does not disclose a "patient monitor module for interfacing..... with an emergency room monitoring device. The examiner cites Sellers as disclosing

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"a patient monitor module..... monitoring device and references Sellers fig 4 and column 5 lines 19-42. After carefully reviewing the entire Sellers patent 5,678,562, its abstract, background of invention and the specific sections cited by the examiner I would respectfully point out to the examiner that he is comparing an apple (Sellers art) to and orange (my art) and the two patents really have nothing in common. Specifically, the practical application and scope of Sellers invention is an ambulatory (portable) EKG monitor (typically called a Holter Monitor be the medical industry and has been in use since about the late 1970's) which is worn by a patient so as the records cardiac events on a 24 hour a day basis as a person goes about their normal routine. Sellers also described a data disk cartridge which can be removed from the ambulatory monitor and put in another device for reading the stored EKG data. I fail to see how the examiner can compare this art to my art given the significantly different scope of the application of my device in reference to the Seller's device. Specifically in the Seller's citation column 5 lines 19-42 he is using the terms "monitor" and "module" and "patient" but not in the same context that I use them in my art. With all due respect to the examiner I find this to be a common problem with examiners wherein you put in key words into a patent search database and pull out patents as "prior art" if they have the same combination of key words with out delving into the details of how these key words are really being used in the prior art patents. When Sellers uses the term "monitor" he is not referring to an emergency room patient monitor as the examiner suggests. Sellers is referring to the ambulatory Holter EKG monitor which is worn by a patient and has nothing to do with ER monitors. In contrast I am referring to ER monitors in my art. When Sellers uses the term "module" he is referring to "electronic module 20" as shown in figure 4. Sellers use of the term module is purely coincidental with my use of the term module and we are not describing the same thing. Sellers module does not have the same characteristics as mine: being a separately enclosed plug in module, with its own separated electronics, able to interface my unique portable storage device to an existing ER monitor via the interface wand and module electronics, and containing my unique software for organizing and displaying prioritized medical records. Sellers is simply describing a module which contains a computer chip and certain software for interfacing to the EKG Holter monitor he describes and said Sellers module does not plug into an ER monitor. Based on Sellers description of his "module" it would not have been obvious for any one skilled in the art to make the leap to the module described in my art, particularly since the module described by Sellers is not remotely similar to my intended application. Further, the examiner cites Sellers col 2, lines 16-19 and lines 45-48. Again, the examiner is comparing apples to oranges and there is a misuse of the terms module and monitor. It is simply a coincidence that Sellers uses the term wireless in his art and I use the term wireless in my art. Again, Sellers ambulatory Holder monitor is a completely different technology and device. A Holter monitor is an continuous and active EKG recording device for looking at "non emergency" EKG events as a person goes about their normal daily routine. Sellers use of wireless technology is meant to make it easier for medical personnel to read and analyze this data in a routine and Non-emergency situation. No where within the Sellers citations, as noted by the examiner, does Sellers contemplate his technologies use for emergency medical situations. It would not have been obvious to anyone skilled in the art to combine my novel art of providing a high capacity storage device as noted in my 6, 467, 690 patent with a wireless means to transmit emergency medical data organized in my unique priority, to a remote ER patient monitor.

As to claim 2:

The examiner cites Yeager as disclosing "the interface wand is capable of ..... by non-contact and wireless means." Again, after careful review of the Yeager he does make several vague references to wireless communication in his text , but what is glaringly omitted is Yeager teaching ANY means at all of how to achieve this wireless communication. Yeager is very specific in noting EPROM , DRAM

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and Dallas 19xx semiconductor devices for his data cell. As of the writing of his patent and as of this current date none of these store chip technologies has ANY wireless communication capabilities at all, and of particular difficulty, if not impossible, would be a carrier signal method of transmitting and receiving data from said devices. My art is very specific in teaching wireless means, via inductance and Radio Frequency means, of sending and receiving data to the storage device and well as sending electrical power to said device to avoid the weight, bulk and significant other problems associated with having a battery in the storage device. In addition, please reference my arguments on this wireless issue in claim 1 above. In addition, Yeager fails to adequately describe the art of his probe 26. What is this probe? How does it work? What art and method transmits and receives data to and from the data cell? How is non-contact wireless transmission of data accomplished? What is the probe comprised of? There is no detailed description of the probe or a figure of it in Yeager's patent. I have added a detailed description of my interface wand to my application to further clarify this issue

As to claim 3:

The examiner cites Yeager as disclosing "the bodily worn device is capable of ..... by non-contact and wireless means." Again, after careful review of the Yeager he does make several vague references to wireless communication in his text , but what is glaringly omitted is Yeager teaching ANY means at all of how to achieve this wireless communication. Yeager is very specific in noting EPROM , DRAM and Dallas 19xx semiconductor devices for his data cell. As of the writing of his patent and as of this current date none of these store chip technologies has ANY wireless communication capabilities at all, and of particular difficulty, if not impossible, would be a carrier signal method of transmitting and receiving data from said devices. My art is very specific in teaching wireless means, via inductance and Radio Frequency means, of sending and receiving data to the storage device and well as sending electrical power to said device to avoid the weight, bulk and significant other problems associated with having a battery in the storage device. In addition, please reference my arguments on this wireless issue in claim 1 above. If one references Yeager fig 4 and its detailed description it is entirely unclear how the wireless transmission of data is to occur to and from this data cell device. Yeager offers no details of the technology or art to accomplish this wireless on contact transmission In addition, Yeager fails to adequately describe the art of his probe 26. What is this probe? How does it work? What art and method transmits and receives data to and from the data cell? How is non-contact wireless transmission of data accomplished? What is the probe comprised of? What components of the data cell transmit and receive the data in non contact wireless fashion?

It is my opinion that the Yeager patent is completely deficient in teaching both the wireless art of the data cell and the wireless art of the probe 26 and I am very surprised the International examiner let his patent issue with such deficiencies.

As to claim 4:

The examiner cites Yeager figs 1 & 9 as "the portable field unit receiving, storing, and displaying ..... on a lighted screen via the interface wand. Again, I would point out to the examiner that an integral part of my art is the unique method I disclose for prioritizing the medical data by risk factors, clinical significance in a medical emergency, and other weighted average factors described herein, and displaying said medical data in the prioritized fashion to facilitate emergency medical treatment. The Yeager patent does not teach such art and my art, as described herein, is far superior and advantageous to the Yeager art. I have modified claim 4 to further clarify and strengthen the

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unique prioritization aspect of the claim and displaying the data on the screen in priority manner.

As to claim 5:

The examiner cites Yeager page 5 lines 18-23 and page 13, lines 5-14 as "the portable field unit is capable of wireless transmission....." Again, after careful review of the Yeager he does make several vague references to wireless communication in his text , but what is glaringly omitted is Yeager teaching ANY means at all of how to achieve this wireless communication. Yeager is very specific in noting EPROM , DRAM and Dallas 19xx semiconductor devices for his data cell. As of the writing of his patent and as of this current date none of these store chip technologies has ANY wireless communication capabilities at all, and of particular difficulty, if not impossible, would be a carrier signal method of transmitting and receiving data from said devices. My art is very specific in teaching wireless means, via inductance and Radio Frequency means, of sending and receiving data to the storage device and well as sending electrical power to said device to avoid the weight, bulk and significant other problems associated with having a battery in the storage device. In addition, please reference my arguments on this wireless issue in claim 1 above. If one references Yeager fig 4 and its detailed description it is entirely unclear how the wireless transmission of data is to occur to and from this data cell device. Yeager offers no details of the technology or art to accomplish this wireless on contact transmission. What art and method transmits and receives data to and from the data cell? From the portable hand held device to the base unit? How is non-contact wireless transmission of data accomplished? What is the probe comprised of? What components of the data cell transmit and receive the data in non contact wireless fashion? Yeager's patent is deficient in this regard And he fails to supply specific and detailed art. I have further modified my claim 5 to strengthen and more clearly define my art.

As to claim 6:

The examiner sites Yeager page 13 lines 17-31 as disclosing "the apparatus of claim 1 wherein.... Software to allow for the organization and display..... " I would point out to the examiner that I have modified my claim 6 to include reference to figures 7 and 8 which describe in detail the art of my software and the unique organization of the medical records. In general terms Yeager describes storing general medical information that "may be useful in an emergency." The Yeager approach is to basically "shotgun" it and present a physician with a listing medical information and it is up the physician to sort through the information and determine what is appropriate to use in an emergency where time and accuracy and critical to patient survival. There is nothing unique or novel about Yeager's approach in organizing these records. This is a woefully inadequate means of providing for medical information in an emergency. As previously described emergency medicine is a very specialized and niche discipline of medicine which requires very specific clinical information, medical tests, prior medical records and other patient information in order to accurately and efficiently diagnose and treat people in a medical emergency. My art is far superior and unique to the Yeager art because I specifically teach a novel mathematical method for combining clinical risk factors, statistical probability factors for proper medical treatment and outcome which provide an accurate and scientific means of organizing medical records in a priority manner for the optimal treatment of patients in medical emergencies. My art has been devised with the advise of some of the leading Director of Emergency Medicine in the US including Dr. Michael Carius, President of the American College of Emergency Physicians. My art methodizes the complex cognitive approach which emergency physicians must take each time they encounter a medical emergency with perhaps some prior medical records present. A physician must cognitively and somewhat subjectively weight the risk

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factors of pre-existing conditions, along with the prior medical records which may be present, and weight these factors against the time constraints of performing additional tests in the ER verses rapid treatment bases on the statistical probability of a positive patient outcome. My art unique in this regard and no one (Yeager of other citations included) has ever combined these risk factors and medical records into a means of organizing and prioritizing medical data for emergency medical treatment. Please reference figure 8 of my application in regard to the organization of the records and its description in the text.

As to claim 7:

The examiner cites Yeager page 5 lines 18-23 as disclosing "the interface wand is capable of ..... by non-contact and wireless means." Again, after careful review of the Yeager he does make several vague references to wireless communication in his text , but what is glaringly omitted is Yeager teaching ANY means at all of how to achieve this wireless communication. Yeager is very specific in noting EPROM , DRAM and Dallas 19xx semiconductor devices for his data cell. As of the writing of his patent and as of this current date none of these store chip technologies has ANY wireless communication capabilities at all, and of particular difficulty, if not impossible, would be a carrier signal method of transmitting and receiving data from said devices. Yeager also omits and fails to teach and art at all on how his probe 26 can transmit and receive data to the data cell. Given Yeager's deficiencies in the data cell described herein, it would be impossible for Yeager's probe to provide for wireless transmission of data to such a data cell. My art is very specific in teaching wireless means, via inductance and Radio Frequency means, of sending and receiving data to the storage device and well as sending electrical power to said device to avoid the weight, bulk and significant other problems associated with having a battery in the storage device. I also have a detailed description of my Interface wand which specifically teaches the wireless data transmission. In addition, please reference my arguments on this wireless issue in claim 1 above. In addition, Yeager fails to adequately describe the art of his probe 26. What is this probe? How does it work? What art and method transmits and receives data to and from the data cell? How is non-contact wireless transmission of data accomplished? What is the probe comprised of? There is no detailed description of the probe or a figure of it in Yeager's patent.

As to claim 8:

The examiner cites Yeager fig 1, page 5 lines 18-23, page 13, lines 5-14 as "...wherein the base unit is capable... in a wireless fashion." Again, after careful review of the Yeager he does make several vague references to wireless communication in his text , but what is glaringly omitted is Yeager teaching ANY means at all of how to achieve this wireless communication. Yeager is very specific in noting EPROM , DRAM and Dallas 19xx semiconductor devices for his data cell. As of the writing of his patent and as of this current date none of these store chip technologies has ANY wireless communication capabilities at all, and of particular difficulty, if not impossible, would be a carrier signal method of transmitting and receiving data from said devices. Yeager also omits and fails to teach and art at all on how his probe 26 can transmit and receive data to the data cell. Given Yeager's deficiencies in the data cell described herein, it would be impossible for Yeager's probe to provide for wireless transmission of data to such a data cell. Yeager also specifically fails to teach how data is transmitted to and received by the base unit in a wireless manner. My art is specific in teaching how data is transmitted in a wireless manner from the storage device through the interface wand to the portable hand held reader and then to a base unit. My art teaches radio frequency carrier signals, telecommunications signals and other wireless means which not be obvious to one skilled in the art.

My art is very specific in teaching wireless means, via inductance and Radio Frequency means, of sending and receiving data to the storage device and well as sending electrical power to said device to avoid the weight, bulk and significant other problems associated with having a battery in the storage device. I also have a detailed description of my Interface wand which specifically teaches the wireless data transmission. In addition, please reference my arguments on this wireless issue in claim 1 above. In addition, Yeager fails to adequately describe the art of his probe 26. What is this probe? How does it work? What art and method transmits and receives data to and from the data cell? How is non-contact wireless transmission of data accomplished? How is data transmitted to the hand held reader in a wireless fashion? To his based unit? Yeager does not teach these key points and his patent is deficient in this regard and my art is far superior and advanced in relation to his art.

As to claim 9:

The examiner cites Yeager figs 7A and 7B as "disclosing.....the base unit is capable of storing..... Into prioritized pages for viewing." After careful review of figs 7A and 7B I see no reference at all any where on these figures to the term "prioritized" or "prioritized pages." After careful review of the

entire Yeager patent I see where he does use the term "prioritized" in a vague and general manner. Nowhere within Yeager does he specifically teach what he means by the term "prioritize" when he refers to the medical data. Does he mean to prioritize the data by date? By age? By chronological order? Yeager is deficient because he fails to teach and such means of setting priorities. In general terms Yeager describes storing general medical information that "may be useful in an emergency." The Yeager approach is to basically "shotgun" it and present a physician with a listing medical information and it is up the physician to sort through the information and determine what is appropriate to use in an emergency where time and accuracy and critical to patient survival. There is nothing unique or novel about Yeager's approach in organizing these records. This is a woefully inadequate means of providing for medical information in an emergency. As previously described emergency medicine is a very specialized and niche discipline of medicine which requires very specific clinical information, medical tests, prior medical records and other patient information in order to accurately and efficiently diagnose and treat people in a medical emergency. My art is far superior and unique to the Yeager art because I specifically teach a novel mathematical method for combining clinical risk factors, statistical probability factors for proper medical treatment and outcome which provide an accurate and scientific means of organizing medical records in a priority manner for the optimal treatment of patients in medical emergencies. My art has been devised with the advise of some of the leading Director of Emergency Medicine in the US including Dr. Michael Carius, President of the American College of Emergency Physicians. My art methodizes the complex cognitive approach which emergency physicians must take each time they encounter a medical emergency with perhaps some prior medical records present. A physician must cognitively and somewhat subjectively weight the risk factors of pre-existing conditions, along with the prior medical records which may be present, and weight these factors against the time constraints of performing additional tests in the ER verses rapid treatment bases on the statistical probability of a positive patient outcome. My art unique in this regard and no one (Yeager of other citations included) has ever combined these risk factors and medical records into a means of organizing and prioritizing medical data for emergency medical treatment. Please reference figure 8 of my application in regard to the organization of the records and its description in the text.

As the examiner can see I revised claim 9 to strengthen it and clarify my unique method of prioritizing the medical data stored on the storage device.

As to claim 10:

I have specifically added figs 7, 8, and 9 to my application to further define the software of my art per the examiners request. Please reference these figures and the descriptions enclosed.

The examiner cites Yeager fig 7A and 7B, page 13 lines 17-31 as " disclosing...the base unit contains software for the control logic.....on the display screen." After examining this text citation I see no specific reference at all to Yeager describing logic to control the software functions of a base unit, and instead Yeager gives a general description of scrolling functions of the software. In addition, Figures 7A and 7B do not teach or describe a base unit using any type of software logic for controlling the system.

Again, Yeager's software approach, which lacks specific descriptions of logic controls as cited by the examiner, is to basically "shotgun" it and present a physician with a listing medical information and it is up the physician to sort through the information and determine what is appropriate to use in an emergency where time and accuracy and critical to patient survival. There is nothing unique or novel about Yeager's approach in organizing these records. This is a woefully inadequate means of providing for medical information in an emergency. As previously described emergency medicine is a very specialized and niche discipline of medicine which requires very specific clinical information, medical tests, prior medical records and other patient information in order to accurately and efficiently diagnose and treat people in a medical emergency. My art is far superior and unique to the Yeager art because I specifically teach a novel mathematical method for combining clinical risk factors, statistical probability factors for proper medical treatment and outcome which provide an accurate and scientific means of organizing medical records in a priority manner for the optimal treatment of patients in medical emergencies. My art has been devised with the advise of some of the leading Director of Emergency Medicine in the US including Dr. Michael Carius, President of the American Colllege of Emergency Physicians. My art methodizes the complex cognitive approach which emergency physicians must take each time they encounter a medical emergency with perhaps some prior medical records present. A physician must cognitively and somewhat subjectively weight the risk factors of pre-existing conditions, along with the prior medical records which may be present, and weight these factors against the time constraints of performing additional tests in the ER verses rapid treatment bases on the statistical probability of a positive patient outcome. My art unique in this regard and no one (Yeager of other citations included) has ever combined these risk factors and medical records into a means of organizing and prioritizing medical data for emergency medical treatment. Please reference figure 8 of my application in regard to the organization of the records and its description in the text.

Again, in terms of software and medical data organization, if one looks at Yeager Table 1 this is an overly simplistic and medically inferior means of organizing patient information for a medical emergency. As one can see, as previously cited by me, the Yeager memory storage approach with the data cell he describes, along with this data organization approach in Table 1 is woefully inadequate for storing any critical baseline clinical tests such as EKG, blood analysis, urine analysis, x-ray, echocardiogram and other tests which require significant memory capacity and could easily save a patient's life in an emergency. The data cell which Yeager describes can only hold about 4000 bits of digital information (including the Dallas 19xx EPROMS and other devices as of this date). The typical digital EKG file takes up a minimum of about 20 kilobytes of data and ER physicians have stated that having a baseline EKG, particularly in the treatment of any person with a pre-existing cardiac condition is THE MOST important piece of medical information for establishing a risk baseline of the patient for treatment options. As one can see from Yeager's Table 1 he makes no attempt to organize the medical data in any specific priority based on risk factors and pre-existing condition

(cont)

which is described in detail in my art, and is far superior to Yeager's approach. In terms of proper memory capacity for a data storage device for this application I would point to my patent 6, 467, 690 and figure 6 of this application which clearly describes a digital storage card capable of holding a minimum of 2000-300 megabytes of digital medical records. This card is capable of storing x-rays, CAT scans and other critical medical tests which could be life saving in an emergency. This art is far superior to Yeager's art. I would also point out to the examiner that I have modified the software sub-claim of claim 1 to further clarify the organization of the medical data as part of my art.

As to claim 11:

The examiner cites Yeager page 7, lines 20-27 as : a base unit capable of archiving and storing.....review." Again, after carefully examining this Yeager citation it is clear that Yeager is describing a very broad stroke software system for storing general medical data. Yeager is not specific about how the records are to be stored, the method of storage and retrieval, the logic behind such storage and retrieval and the priority system for storing said records. In terms of software and medical data organization, if one looks at Yeager Table 1 this is an overly simplistic and medically inferior means of organizing patient information for a medical emergency. As one can see, as previously cited by me, the Yeager memory storage approach with the data cell he describes, along with this data organization approach in Table 1 is woefully inadequate for storing any critical baseline clinical tests such as EKG, blood analysis, urine analysis, x-ray, echocardiogram and other tests which require significant memory capacity and could easily save a patient's life in an emergency. Again, Yeager's software approach, which lacks specific descriptions of logic controls as cited by the examiner, is to basically "shotgun" it and present a physician with a listing medical information and it is up the physician to sort through the information and determine what is appropriate to use in an emergency where time and accuracy and critical to patient survival. There is nothing unique or novel about Yeager's approach in organizing these records. This is a woefully inadequate means of providing for medical information in an emergency. As previously described emergency medicine is a very specialized and niche discipline of medicine which requires very specific clinical information, medical tests, prior medical records and other patient information in order to accurately and efficiently diagnose and treat people in a medical emergency. My art is far superior and unique to the Yeager art because I specifically teach a novel mathematical method for combining clinical risk factors, statistical probability factors for proper medical treatment and outcome which provide an accurate and scientific means of organizing medical records in a priority manner for the optimal treatment of patients in medical emergencies. My art has been devised with the advise of some of the leading Director of Emergency Medicine in the US including Dr. Michael Carius, President of the American College of Emergency Physicians. My art methodizes the complex cognitive approach which emergency physicians must take each time they encounter a medical emergency with perhaps some prior medical records present. A physician must cognitively and somewhat subjectively weight the risk factors of pre-existing conditions, along with the prior medical records which may be present, and weight these factors against the time constraints of performing additional tests in the ER verses rapid treatment bases on the statistical probability of a positive patient outcome. My art unique in this regard and no one (Yeager of other citations included) has ever combined these risk factors and medical records into a means of organizing and prioritizing medical data for emergency medical treatment. Please reference figure 8 of my application in regard to the organization of the records and its description in the text.

As to claim 12:

The examiner acknowledges that Yeager does not teach a patient module with a printed circuit board and the other details of my art per my figure 5 and its detailed description. The examiner cites Sellers Col 4 line 51-65, col 5 lines 18-34, col 6 lines 3-10 as disclosing "a patient module contains interface board with electronic contacts....." After carefully reviewing the entire Sellers patent 5,678,562, its abstract, background of invention and the specific sections cited by the examiner I would respectfully point out to the examiner that he is comparing an apple (Sellers art) to and orange (my art) and the two patents really have nothing in common. Specifically, the practical application and scope of Sellers invention is an ambulatory (portable) EKG monitor (typically called a Holter Monitor be the medical industry and has been in use since about the late 1970's) which is worn by a patient so as the records cardiac events on a 24 hour a day basis as a person goes about their normal routine. Sellers also described a data disk cartridge which can be removed from the ambulatory monitor and put in another device for reading the stored EKG data. I fail to see how the examiner can compare this art to my art given the significantly different scope of the application of my device in reference to the Seller's device. Specifically in the Seller's citation column 5 lines 19-42 he is using the terms "monitor" and "module" and "patient" but not in the same context that I use them in my art. With all due respect to the examiner I find this to be a common problem with examiners wherein you put in key words into a patent search database and pull out patents as "prior art" if they have the same combination of key words with out delving into the details of how these key words are really being used in the prior art patents. When Sellers uses the term "monitor" he is not referring to an emergency room patient monitor as the examiner suggests. Sellers is referring to the ambulatory Holter EKG monitor which is worn by a patient and has nothing to do with ER monitors. In contrast I am referring to ER monitors in my art. When Sellers uses the term "module" he is referring to "electronic module 20" as shown in figure 4. Sellers use of the term module is purely coincidental with my use of the term module and we are not describing the same thing. Sellers module does not have the same characteristics as mine: being a separately enclosed plug in module, with its own separated electronics, able to interface my unique portable storage device to an existing ER monitor via the interface wand and module electronics, and containing my unique software for organizing and displaying prioritized medical records. Sellers is simply describing a module which contains a computer chip and certain software for interfacing to the EKG Holter monitor he describes and said Sellers module does not plug into an ER monitor. Based on Sellers description of his "module" it would not have been obvious for any one skilled in the art to make the leap to the module described in my art, particularly since the module described by Sellers is not remotely similar to my intended application. Further, the examiner cites Sellers col 2, lines 16-19 and lines 45-48. Again, the examiner is comparing apples to oranges and there is a misuse of the terms module and monitor. It is simply a coincidence that Sellers uses the term wireless in his art and I use the term wireless in my art. Again, Sellers ambulatory Holder monitor is a completely different technology and device. A Holter monitor is an continuous and active EKG recording device for looking at "non emergency" EKG events as a person goes about their normal daily routine. Sellers use of wireless technology is meant to make it easier for medical personnel to read and analyze this data in a routine and Non-emergency situation. No where within the Sellers citations, as noted by the examiner, does Sellers contemplate his technologies use for emergency medical situations. It would not have been obvious to anyone skilled in the art to combine my novel art of providing a high capacity storage device as noted in my 6, 467, 690 patent with a wireless means to transmit emergency medical data organized in my unique priority, to a remote ER patient monitor.

As per claim 13:

See my modifications to claim 13

(cont)

The examiner acknowledges that Yeager does not teach the apparatus of claim one "where in the patient module contain..... patient medical records." The examiner cites Sellers column 4 lines 51-65, column 5 lines 18-34, and column 6 lines 3-10 as "disclosing "the patient module contains an interface printed circuit board.... processes signals from patient electrodes."

Again, after carefully reviewing the entire Sellers patent 5,678,562, its abstract, background of invention and the specific sections cited by the examiner I would respectfully point out to the examiner that he is comparing an apple (Sellers art) to and orange (my art) and the two patents really have nothing in common. Specifically, the practical application and scope of Sellers invention is an ambulatory (portable) EKG monitor (typically called a Holter Monitor be the medical industry and has been in use since about the late 1970's) which is worn by a patient so as the records cardiac events on a 24 hour a day basis as a person goes about their normal routine. Sellers also described a data disk cartridge which can be removed from the ambulatory monitor and put in another device for reading the stored EKG data. I fail to see how the examiner can compare this art to my art given the significantly different scope of the application of my device in reference to the Seller's device. Specifically in the Seller's citation columns 4, column 5 and column 6 he is using the terms "monitor" and "module" and "patient" but not in the same context that I use them in my art. With all due respect to the examiner I find this to be a common problem with examiners wherein you put in key words into a patent search database and pull out patents as "prior art" if they have the same combination of key words with out delving into the details of how these key words are really being used in the prior art patents. When Sellers uses the term "monitor" he is not referring to an emergency room patient monitor as the examiner suggests. Sellers is referring to the ambulatory Holter EKG monitor which is worn by a patient and has nothing to do with ER monitors. In contrast I am referring to ER monitors in my art. When Sellers uses the term "module" he is referring to "electronic module 20" as shown in figure 4. Sellers use of the term module is purely coincidental with my use of the term module and we are not describing the same thing. Sellers module does not have the same characteristics as mine: <u>being a separately enclosed plug in module, with its own separated electronics, able to interface my unique portable storage device to an existing ER monitor via the interface wand and module electronics, and containing my unique software for organizing and displaying prioritized medical records.</u> Sellers is simply describing a module which contains a computer chip and certain software for interfacing to the EKG Holter monitor he describes and said Sellers module does not plug into an ER monitor. Based on Sellers description of his "module" it would not have been obvious for any one skilled in the art to make the leap to the module described in my art, particularly since the module described by Sellers is not remotely similar to my intended application. After careful review of the 3 Sellers citations I can find no specific reference to a separate and "stand alone "module" as described by my art with contact pads which are capable of interfacing the "slave" module to the "master" monitor. In the three Sellers citations Sellers is describing "dedicated" and hard wired module with connectors which are permanently affixed to the patient monitor electronics. This module is not meant to be removed and plugged into another device easily and with portability as described by my art. Again, Sellers is using there terms differently than my use of then (semantics) and when Sellers uses the terms electrical contacts and electrodes he is referring to specific components of an EKG which are well known terms used in designing EKG monitors- but I am not using them the same way to describe my art.

Further, the examiner cites Sellers, column 1 lines 49-57 and column 2 lines 48-62 , in light of Yeager as being obvious in teaching "the patient module containing printed circuit board for transmitting power to the module board and for transmitting and receiving....." Again, Yeager and Sellers are teaching much different art than mine which is outside of the scope and application of my art. The examiner is comparing apples to oranges in comparing Sellers and Yeager to my art. I am describing

(cont)

a module which is a portable "slave" device and a plug and play device which can be portably plugged into monitors which have the appropriate module slots for such devices (typical with ER patient monitors). Since my module does not have its own power or data sources it is a slave to the ER monitor (master) plugged into and receives its power and data from the master monitor through the electrode contact pads. This module portability concept and slave-master concept is completely novel and different from the art which either Sellers and Yeager teach and, since neither the examiner or Sellers or Yeager perceived these important differences or describes these differences, it would not have been obvious to anyone skilled in the art to teach or describe this novel art. As you can see I have modified my claim 13 to further clarify and distinguish my art. I have also done the same to the text description in the body of the application without introducing any new subject matter to the application.

As per claim 14:

The examiner cites Yeager fig 1 and 8 and page 5 lines 18-23 as "disclosing the apparatus of claim 1 wherein the patient module contains an interface wand..... For storage and display."

The examiner cites Yeager page 5 lines 18-23 as disclosing "the interface wand is capable of ..... by non-contact and wireless means." Again, after careful review of the Yeager he does make several vague references to wireless communication in his text , but what is glaringly omitted is Yeager teaching ANY means at all of how to achieve this wireless communication. Yeager is very specific in noting EPROM , DRAM and Dallas 19xx semiconductor devices for his data cell. As of the writing of his patent and as of this current date none of these store chip technologies has ANY wireless communication capabilities at all, and of particular difficulty, if not impossible, would be a carrier signal method of transmitting and receiving data from said devices. Yeager also omits and fails to teach and art at all on how his probe 26 can transmit and receive data to the data cell. Given Yeager's deficiencies in the data cell described herein, it would be impossible for Yeager's probe to provide for wireless transmission of data to such a data cell. My art is very specific in teaching wireless means, via inductance and Radio Frequency means, of sending and receiving data to the storage device and well as sending electrical power to said device to avoid the weight, bulk and significant other problems associated with having a battery in the storage device. I also have a detailed description of my Interface wand which specifically teaches the wireless data transmission. In addition, please reference my arguments on this wireless issue in claim 1 above. In addition, Yeager fails to adequately describe the art of his probe 26. What is this probe? How does it work? What art and method transmits and receives data to and from the data cell? How is non-contact wireless transmission of data accomplished? What is the probe comprised of? There is no detailed description of the probe or a figure of it in Yeager's patent.

It is my opinion that the Yeager patent is completely deficient in teaching both the wireless art of the data cell and the wireless art of the probe 26 and I am very surprised the International examiner let his patent issue with such deficiencies.

In addition, the Yeager art fails to teach how the data cell 24. Which works via the wand and in wireless fashion, can transmit and receive data from the wireless wand. Therefore, the Yeager are is entirely deficient in teaching any of the wireless art which he so casually mentions.

In addition, after careful review of fig 1 and figs 8 I find no specific description of how the wireless mode is taught by Yeager. It would not have been obvious to one skilled in the art to teach the wireless art which I describe in my application.

As per claim 15:

The examiner cites Yeager fig 7A and 7B and page 5, lines 2-14 as "a system contains software and logic for the seamless storage, prioritization....." After examining these citations I see nothing unique or novel about Yeager's approach in organizing these records. This is a woefully inadequate means of providing for medical information in an emergency. As previously described emergency medicine is a very specialized and niche discipline of medicine which requires very specific clinical information, medical tests, prior medical records and other patient information in order to accurately and efficiently diagnose and treat people in a medical emergency. My art is far superior and unique to the Yeager art because I specifically teach a novel mathematical method for combining clinical risk factors, statistical probability factors for proper medical treatment and outcome which provide an accurate and scientific means of organizing medical records in a priority manner for the optimal treatment of patients in medical emergencies. My art has been devised with the advise of some of the leading Director of Emergency Medicine in the US including Dr. Michael Carius, President of the American College of Emergency Physicians. My art methodizes the complex cognitive approach which emergency physicians must take each time they encounter a medical emergency with perhaps some prior medical records present. A physician must cognitively and somewhat subjectively weight the risk factors of pre-existing conditions, along with the prior medical records which may be present, and weight these factors against the time constraints of performing additional tests in the ER verses rapid treatment bases on the statistical probability of a positive patient outcome. My art unique in this regard and no one (Yeager of other citations included) has ever combined these risk factors and medical records into a means of organizing and prioritizing medical data for emergency medical treatment. Please reference figure 8 of my application in regard to the organization of the records and its description in the text. I would also point out to the examiner that I have modified the software sub-claim of claim 1 to further clarify the organization of the medical data as part of my art.

The examiner cites Yeager figures 7A and 7B as "software for digitizing, organizing and displaying critical patient information in page format....." Again, based on the arguments presented above, my approach to organizing medical records based on establishing a priority by novel risk weighing factor of pre-existing conditions, time lapse to treatment, clinical risk factors and other factors, is much more effective and objective as a means of providing ER physicians and other treating medical personnel with an objective and rapid means of making complex treatment decisions (minutes and seconds count in ER treatment and could be the difference between life and death). Again, if the examiner references my figures 4, 7 and 8 and their detailed descriptions I am confident that he will conclude that my approach is novel and superior to the Yeager approach, as well as the other examiner citations. I would also point out to the examiner that I have modified the software sub-claim of claim 1 to further clarify the organization of the medical data as part of my art.

Again, in terms of software and medical data organization, if one looks at Yeager Table 1 this is an overly simplistic and medically inferior means of organizing patient information for a medical emergency. As one can see, as previously cited by me, the Yeager memory storage approach with the data cell he describes, along with this data organization approach in Table 1 is woefully inadequate for storing any critical baseline clinical tests such as EKG, blood analysis, urine analysis, x-ray, echocardiogram and other tests which require significant memory capacity and could easily save a patient's life in an emergency. The data cell which Yeager describes can only hold about 4000 bits of digital information (including the Dallas 19xx EPROMS and other devices as of this date). The typical digital EKG file takes up a minimum of about 20 kilobytes of data and ER physicians have stated that having a baseline EKG, particularly in the treatment of any person with a pre-existing cardiac condition is THE MOST important piece of medical information for establishing a risk baseline

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of the patient for treatment options. As one can see from Yeager's Table 1 he makes no attempt to organize the medical data in any specific priority based on risk factors and pre-existing condition which is described in detail in my art, and is far superior to Yeager's approach. In terms of proper memory capacity for a data storage device for this application I would point to my patent 6, 467, 690 and figure 6 of this application which clearly describes a digital storage card capable of holding a minimum of 2000-300 megabytes of digital medical records. This card is capable of storing x-rays, CAT scans and other critical medical tests which could be life saving in an emergency. This art is far superior to Yeager's art. I would also point out to the examiner that I have modified the software sub-claim of claim 1 to further clarify the organization of the medical data as part of my art.

In addition, I would point out to the examiner that I have modified my claim 6 to include reference to figures 7 and 8 which describe in detail the art of my software and the unique organization of the medical records. In general terms Yeager describes storing general medical information that "may be useful in an emergency." The Yeager approach is to basically "shotgun" it and present a physician with a listing medical information and it is up the physician to sort through the information and determine what is appropriate to use in an emergency where time and accuracy and critical to patient survival. There is nothing unique or novel about Yeager's approach in organizing these records. This is a woefully inadequate means of providing for medical information in an emergency. As previously described emergency medicine is a very specialized and niche discipline of medicine which requires very specific clinical information, medical tests, prior medical records and other patient information in order to accurately and efficiently diagnose and treat people in a medical emergency. My art is far superior and unique to the Yeager art because I specifically teach a novel mathematical method for combining clinical risk factors, statistical probability factors for proper medical treatment and outcome which provide an accurate and scientific means of organizing medical records in a priority manner for the optimal treatment of patients in medical emergencies. My art has been devised with the advise of some of the leading Director of Emergency Medicine in the US including Dr. Michael Carius, President of the American College of Emergency Physicians. My art methodizes the complex cognitive approach which emergency physicians must take each time they encounter a medical emergency with perhaps some prior medical records present. A physician must cognitively and somewhat subjectively weight the risk factors of pre-existing conditions, along with the prior medical records which may be present, and weight these factors against the time constraints of performing additional tests in the ER verses rapid treatment bases on the statistical probability of a positive patient outcome. My art unique in this regard and no one (Yeager of other citations included) has ever combined these risk factors and medical records into a means of organizing and prioritizing medical data for emergency medical treatment. Please reference figure 8 of my application in regard to the organization of the records and its description in the text.

In addition, after careful review of page 5 lines 2-14 I see no specific teaching by Yeager on the "organization of his software and logic for seamless storage, prioritization of readable pages on a display screen."

As per claim 16:

The examiner will note that I have added some claims (which were part of the original subject manner of the application) which I inadvertently omitted. I have renumbered the claims and therefore claim 16 is now claim 30 (the start of my method claims).

Again, I would direct the examiner to all of the arguments which I have previously laid forth in this letter regarding how my art is unique, novel, separate and unique from both Yeager and Sellers, and also not obvious in any regards.

All of my previous arguments in regards to Yeager and Seller's apparatus and my apparatus, apply equally to art of my method and the art of Yeager and Seller's method. Namely, my method teaches a unique and novel means of prioritizing and organizing the medical data based on a weighted average of risk factors of the pre-existing conditions of a patient and the availability of clinically significant medical records and data which will effect the outcome of clinical treatment in an emergency. Again, Yeager provides no details at all on how to accomplish wireless transmission of data either from the data cell 24 or the data probe 26. Yeager's art is deficient in this regard and my art specifically teaches unique methods of wireless transmission of data to and from both my storage device and my interface wand, and my art would not have been obvious to anyone skilled in the art.

The method of my device is far superior to both Yeager, Sellers, and all the other previously cited by the examiner because I teach using various high capacity portable storage devices (Reeves 6,467,690, 09/578,664, 09/597,107) which can truly store medically significant amounts of medical data which are crucial in a medical emergency.

I refer the examiner to the detailed explanations of how my art and apparatus (same arguments for the method claims) uses the portable storage devices, hand held devices and base unit as an organized system for the seamless prioritization, transmission and display of crucial medical data and information.

Again, I refer the examiner to all of the arguments I have previously presented in this report in regards to how my art is significantly superior and distinctive from the prior art which the examiner had cited.

As per claim 17:

I would point out to the examiner that my old claim 17 is now claim 31

I would refer the examiner back to all the previous arguments I have used in this report for Explaining how my art is far superior to Yeager, Sellers and the other art cited in terms of organizing and prioritizing medically significant and clinically significant medical data for use in an emergency. I specifically teach a method of using a weighted average of the risk factors to the patient of their pre-existing conditions coupled with the probability of the likely medical benefit of having access to medical data to treat said pre-existing condition and ranking said records based on highest to lowest risk factors.

After careful review of the Yeager abstract I would respectfully disagree with some of the examiners observations. Specifically, the Yeager abstract makes no mention at all, from either a conceptual or literal perspective, of "retrieving" or "organizing" or "other vital personal information." I simply do not see how the examiner can infer such items from the Yeager abstract and it is my respectful opinion that the examiner is reading more into the Yeager abstract than really exists. The terms "organizing" and "vital personal information" are key points which are specific aspects of my art which are simply not part of the Yeager art. Specifically, I describe in detail how the condensed medical records of my art are organized in a priority fashion based on the severity of the pre-existing medical condition of the user and ranked by weighted average based on their clinical utility in treating a user in a medical situation. In addition, Yeager makes no reference to "other vital personal information" other than medical records. My art specifically includes a color photo ID of a user, living will instructions, organ

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donor instructions, and other personal non-medical information which could include banking information, credit card information and other personal and family related information which may aid in a medical or other type of emergency. Yeager does us the word "worn" in his abstract and specifically limits his art to such worn devices. My art is not specifically limited to worn devices and I specifically describe high capacity storage cards and data storage disks (my figure 6) which can be either carried in the pocket or wallet and are not specifically worn. Based the scope of this subject matter in my art I have modified both the title of my invention and abstract to reflect the broader scope of my art in terms of "personal data storage devices" and specifically "worn" devices.

From a practical point of view Yeager's abstract, and the body of his invention, describe storing a person's "medical records." Yeager describes storing the complete medical records and archives of a person on this data cell device. This is simply an impractical concept, particularly in the context of a medical emergency as described by Yeager. Emergency medicine is a highly specialized form of medicine and presenting the complete archives of a person's medical history would have little or no practical medical value. Emergency medicine, and its utilization of prior medical data of a patient, specifically relies on a focused organization of medical data based on a ranking (priority) of the severity of a pre-existing condition and the clinical utility of the medical data in treating the pre-existing medical condition during said emergency. No invention or prior art, including Yeager or Sellers or other, describes the art in my application for prioritizing and ranking said medical data by weighted average in order of severity of pre-existing condition. This "organization" as described by my art is a superior art and technology which would not have been obvious to one skilled in the art and specifically has not been taught by any of the prior art or the examiner.

In addition, it would not have been obvious to a person skilled in the art to have include a high capacity data storage card or a data disk as described in my 6, 467,690 patent which issued on 10/22/02. I also have art which is related to this application which is further described in 09/578,664 and 09/597,107 which have been previously noted and referenced in the reorganized body of my application (enclosed).

After examining these Yeager citations I see no specific reference at all to Yeager using the term "medically significant" or "significant." In general terms Yeager describes storing general medical information which "may be useful in an emergency." The Yeager approach is to basically "shotgun" it and present a physician with a listing medical information and it is up the physician to sort through the information and determine what is appropriate to use in an emergency where time and accuracy and critical to patient survival. There is nothing unique or novel about Yeager's approach in organizing these records. This is a woefully inadequate means of providing for medical information in an emergency. As previously described emergency medicine is a very specialized and niche discipline of medicine which requires very specific clinical information, medical tests, prior medical records and other patient information in order to accurately and efficiently diagnose and treat people in a medical emergency. My art is far superior and unique to the Yeager art because I specifically teach a novel mathematical method for combining clinical risk factors, statistical probability factors for proper medical treatment and outcome which provide an accurate and scientific means of organizing medical records in a priority manner for the optimal treatment of patients in medical emergencies. My art has been devised with the advise of some of the leading Director of Emergency Medicine in the US including Dr. Michael Carius, President of the American College of Emergency Physicians. My art methodizes the complex cognitive approach which emergency physicians must take each time they encounter a medical emergency with perhaps some prior medical records present. A physician must cognitively and somewhat subjectively weight the risk factors of pre-existing conditions, along with the

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prior medical records which may be present, and weight these factors against the time constraints of performing additional tests in the ER verses rapid treatment bases on the statistical probability of a positive patient outcome. My art unique in this regard and no one (Yeager of other citations included) has ever combined these risk factors and medical records into a means of organizing and prioritizing medical data for emergency medical treatment. Please reference figure 8 of my application in regard to the organization of the records and its description in the text.

Again, based on the arguments presented above, my approach to organizing medical records based on establishing a priority by novel risk weighing factor of pre-existing conditions, time lapse to treatment, clinical risk factors and other factors, is much more effective and objective as a means of providing ER physicians and other treating medical personnel with an objective and rapid means of making complex treatment decisions (minutes and seconds count in ER treatment and could be the difference between life and death). Again, if the examiner references my figures 4, 7 and 8 and their detailed descriptions I am confident that he will conclude that my approach is novel and superior to the Yeager approach, as well as the other examiner citations. I would also point out to the examiner that I have modified the software sub-claim of claim 1 to further clarify the organization of the medical data as part of my art.

Again, in terms of software and medical data organization, if one looks at Yeager Table 1 this is an overly simplistic and medically inferior means of organizing patient information for a medical emergency. As one can see, as previously cited by me, the Yeager memory storage approach with the data cell he describes, along with this data organization approach in Table 1 is woefully inadequate for storing any critical baseline clinical tests such as EKG, blood analysis, urine analysis, x-ray, echocardiogram and other tests which require significant memory capacity and could easily save a patient's life in an emergency. The data cell which Yeager describes can only hold about 4000 bits of digital information (including the Dallas 19xx EPROMS and other devices as of this date). The typical digital EKG file takes up a minimum of about 20 kilobytes of data and ER physicians have stated that having a baseline EKG, particularly in the treatment of any person with a pre-existing cardiac condition is THE MOST important piece of medical information for establishing a risk baseline of the patient for treatment options. As one can see from Yeager's Table 1 he makes no attempt to organize the medical data in any specific priority based on risk factors and pre-existing condition which is described in detail in my art, and is far superior to Yeager's approach. In terms of proper memory capacity for a data storage device for this application I would point to my patent 6, 467, 690 and figure 6 of this application which clearly describes a digital storage card capable of holding a minimum of 2000-300 megabytes of digital medical records. This card is capable of storing x-rays, CAT scans and other critical medical tests which could be life saving in an emergency. This art is far superior to Yeager's art. I would also point out to the examiner that I have modified the software sub-claim of claim 1 to further clarify the organization of the medical data as part of my art.

As per claim 18:

Please note that claim 18 is now renumbered as claim 32

I would refer the examiner back to all of my previous arguments in regards to Yeager and his use of the term "wireless" when referring to his probe 26, his data cell 24 and his field unit. No where within the entire Yeager patent does he teach of describe any method whatsoever for how to transmit data in a wireless manner to and from his data cell, to and from his probe 26, and to and from his portable

(cont)

field unit. Quite frankly I don't think Yeager had any idea how to do this and his patent is extremely deficient in this regard. My patent teaches specific and detailed methods of how to wirelessly transmit data to and from my storage devices (figs 10,9 and 6) , to and from my interface wand and to an from my portable field unit. In addition, my art and methods in this regard would not have been obvious to one skilled in the art.

As per claim 19:

Please note that claim 19 is now renumbered as claim 33.

Again, I would refer the examiner to all of the previous detailed arguments I have presented in regards to my unique and superior methods for organizing, prioritizing and displaying medical data and information for emergency use. As I have previously described Yeager does not teach any specific method at all for the criterion of how to organize , prioritize and display medical records. Yeager's approach is a disorganized "shotgun" approach which is entirely inadequate in a medical emergency where seconds count. In Yeager's art a physician would have to spend a significant amount of critical time blindly searching for medical data and a records of a users pre-existing medical conditions. Yeager also does not teach any method how to rank and/or prioritize any such records or data.

I specifically teach a detailed method of how to rank, prioritize, organize and display the medical data and information in a logical and methodical manner which is based on sound and proven medical risk indicators and clinical data.

As per claim 20:

Please note that claim 20 is now claim 34

Again, I would refer the examiner to all of the previous detailed arguments I have presented in regards to Yeager's deficiencies in not teaching any method or art at all for the wireless transmission of data from his data cell to his probe and from his probe to his portable unit to the hand held unit and to his base unit. It is not fair to assume that Yeager has adequate art or technology to make this wireless transfer of data especially in light of the fact that Yeager has specifically identified EPROM, DRAM and Dallas Semiconductor devices which have no capability at all to transfer data in a wireless manner. I am very specific in teaching numerous methods and arts to transfer data in a wireless manner from my storage devices to my interface wand, and from my interface wand to my hand held device and from my hand held device to my base unit. I would refer the examine to my detailed descriptions of methods from figures 6,9, and 10.

As per claim 21:

Please note that claim 21 is now claim 35

The examiner acknowledges that Yeager does not teach the method of claim 16 (now claim 30) and specifically transmitting data from Yeager's data cell to a multi use patient monitor. If the examiner acknowledges that Yeager does not teach this art then why does he reject my claim? The examiner offers no specific reason why he is rejecting my claim and again cites Yeager as "teaching" a wireless means of transmitting data from his data cell 24 . Again, Yeager is entirely deficient in not teaching any method at all in electronically transmitting data from his data cell and the semiconductor devices

(cont)

Yeager cites (EPROM, DRAM, Dallas). I specifically teach numerous methods to transfer data in a wireless manner from my storage devices to my interface wand.

As per claim 22:

Please note that claim 22 is now claim 36

Again, the examiner cites Yeager as teaching a method of organizing, prioritizing and displaying Medical records in light of claim 21 (now claim 35) and the wireless issue above. Again Yeager is teaching an inferior method of organizing and displaying medical records and Yeager does not teach any method at all, as previously noted, of prioritizing the medical records. I teach a far superior and logical method of organizing, prioritizing and displaying medical records and data based on a weighed average of medical risk factors of a person's pre-existing medical conditions, and records organized and prioritized from highest risk to lowest risk for use in a medical emergency. Neither Yeager nor any of the other prior art cited by the examiner teaches my far superior method of organizing, prioritizing and displaying said medical records and data for emergency use.

As per claim 23:

Please note that claim 23 is now claim 37

Again, I would refer the examiner to all of the previous detailed arguments I have presented in regards to Yeager's deficiencies in not teaching any method or art at all for the wireless transmission of data from his data cell to his probe and from his probe to his portable unit to the hand held unit and to his base unit. It is not fair to assume that Yeager has adequate art or technology to make this wireless transfer of data especially in light of the fact that Yeager has specifically identified EPROM, DRAM and Dallas Semiconductor devices which have no capability at all to transfer data in a wireless manner. I am very specific in teaching numerous methods and arts to transfer data in a wireless manner from my storage devices to my interface wand, and from my interface wand to my hand held device and from my hand held device to my base unit. I would refer the examine to my detailed descriptions of methods from figures 6,9, and 10.

The method which Yeager is describing for wireless transmission from his data cell storage devices to His probe is not technically feasible.

As to claim 24:

Please note that claim 24 is now claim 38

Again, the examiner cites Yeager as teaching a method of organizing, prioritizing and displaying Medical records in light of claim 21 (now claim 35) and the wireless issue above. Again Yeager is teaching an inferior method of organizing and displaying medical records and Yeager does not teach any method at all, as previously noted, of prioritizing the medical records. I teach a far superior and logical method of organizing, prioritizing and displaying medical records and data based on a weighed average of medical risk factors of a person's pre-existing medical conditions, and records organized and prioritized from highest risk to lowest risk for use in a medical emergency. Neither Yeager nor any of the other prior art cited by the examiner teaches my far superior method of organizing, prioritizing and displaying said medical records and data for emergency use.

As to claim 25:

Please note that claim 25 is now claim 39
The examiner is citing Yeager page 13, lines 17-31 as "disclosing a method ... including means of prioritizing medical records in a medically significant fashion so most critical life saving information, tailored.... Is displayed first." After examining this Yeager citation I see no language or art which would indicating what the examiner is quoting in any way shape or form. I feel strongly the examiner is subjectively interpreting Yeager and attempting to project my superior art into Yeager's art. Yeager does not teach prioritizing records my medically significant factors nor does he teach tailoring the information to suit the individual. Yeager certainly does not teach my superior method of organizing medical information by medical risk factor of pre-existing conditions and the organization and display critical medical tests such as blood work, urine work, EKG, x-rays CAT scans, MRI's, etc.. Yeager's Data cell simply does not have the capacity to stored such medical tests and my storage devices do have the capacity as evidenced by my 6, 467,690 patent.

Yeager's organization of current medications and allergies in a medical emergency is entirely inadequate, medically unsound, and does not even come close to representing and of the crucial and life saving medical information which emergency personnel would need for adequate treatment and to save a person's life in a medical emergency. My methods and art are far superior to Yeager's

As to claim 26:

Please not that claim 26 is now claim 40

The examiner cites Yeager as disclosing a method of " ... allow for a common software for storing records within the bodily worn device, compatible with the field unit and base unit..." The examiner notes that Yeager specifically mentions Windows as the operating system. I would point out to the examiner that it is commonly know to anyone skilled in the electronics industry that EPROMS, DRAMS, and Dallas semiconductor storage devices (which Yeager discloses as his data storage device) to not operate on any Windows based software platform and none of these devices is technically capable of running on Windows, supporting Windows or capable of having adequate storage capacity to store Windows. Therefore it is not at all technically feasible to apply the art which Yeager is describing and the Yeager art is entirely deficient in this regard. Therefore, it would not be technically feasible for Yeager to have a data cell, portable unit and base unit all running on a Windows platform for a common software language.

My methods and art, including my high capacity storage devices (6,497, 690) are perfectly capable of storing and supporting a Windows based software platform.

As to claim 27:

Please note that claim 27 is now claim 41

The examiner cites Yeager fig 1 units 26 and 28, and page 5 lines 14-18 as disclosing a method of "updating the medical records within a bodily worn device via wireless means." After careful review of the Yeager citations I find no specific reference to updating the records or data in his data cell via wireless means. In addition, I would refer the examiner to all of the previous detailed arguments I have presented in regards to Yeager's deficiencies in not teaching any method or art at all for the wireless transmission of data from his data cell to his probe and from his probe to his portable unit to the hand held unit and to his base unit. It is not fair to assume that Yeager has adequate art or technology to make this wireless transfer of data especially in light of the fact that Yeager has

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specifically identified EPROM, DRAM and Dallas Semiconductor devices which have no capability at all to transfer data in a wireless manner. I am very specific in teaching numerous methods and arts to transfer data in a wireless manner from my storage devices to my interface wand, and from my interface wand to my hand held device and from my hand held device to my base unit. I would refer the examine to my detailed descriptions of methods from figures 6,9, and 10.

In addition Yeager fig 1 units 26 and 28 are the probe and base unit and there are no references within the citations noted by the examiner to suggest that Yeager is teaching any method of wireless transfer of data to and from his data cell for updating medical records or data.

As to claim 28:

Please note that claim 28 is now claim 42

The examiner cites Yeager fig 1 units 26 and 28, and page 5 lines 14-18, page 11 lines 9-12, line 11 as disclosing a method of "updating or re-writing the medical records within a bodily worn device via wireless means." After careful review of the Yeager citations I find no specific reference to updating or re-writing his data or records to his data cell via wireless means. In addition, I would refer the examiner to all of the previous detailed arguments I have presented in regards to Yeager's deficiencies in not teaching any method or art at all for the wireless transmission of data from his data cell to his probe and from his probe to his portable unit to the hand held unit and to his base unit. It is not fair to assume that Yeager has adequate art or technology to make this wireless transfer of data especially in light of the fact that Yeager has specifically identified EPROM, DRAM and Dallas Semiconductor devices which have no capability at all to transfer data in a wireless manner. I am very specific in teaching numerous methods and arts to transfer data in a wireless manner from my storage devices to my interface wand, and from my interface wand to my hand held device and from my hand held device to my base unit. I would refer the examine to my detailed descriptions of methods from figures 6,9, and 10.

In addition Yeager fig 1 units 26 and 28 are the probe and base unit and there are no references within the citations noted by the examiner to suggest that Yeager is teaching any method of wireless transfer of data to and from his data cell for updating medical records or data.

8. The examiner's final comment is to cite other prior art including 6,188,407 and "wearable computers." After careful review of these patents, their abstracts, intended use, and the scope of their applications I find no conflicts or overlaps with my art. In addition my art is superior and more advanced than this art and contains more valid and specific art, and novel technology for providing medical data and information in a medical emergency.

Please call me at 203-288-1588 if you have any questions. As you can see I have reorganized the body of the patent to put it in the standard format required. Enclosed please find revised patent, claims, drawings, and other supporting documents.

Sincerely,

William Reeves, GM